

## REMARKS

By this Amendment, Applicants propose to cancel claim 1, without prejudice or disclaimer of the subject matter therein, amend claims 2, 3, 5, 6, 8, 9, 12, 18, 22, 30, 41, and 49, and add new claims 55-68. With claims 21, 29, and 31 having been previously canceled, claims 2-20, 22-28, 30, and 32-68 are pending upon entry of this Amendment.

In the final Office Action of April 22, 2004<sup>1</sup> ("OA"):

1. The disclosure was objected to because of an informality in claim 12;
2. Claims 41 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,572,320 to *Reintjes et al.* ("*Reintjes*");
3. Claims 18-20 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,496,460 to *Haarstad et al.* ("*Haarstad*");
4. Claims 1, 2, 5-8, 12-19, 22, 25, 41, and 49-52 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,968,371 to *Verdegan et al.* ("*Verdegan*");
5. Claims 23, 24, and 53 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Verdegan*;
6. Claims 11, 26-28, 30, 32-40, 44-48, and 54 were allowed; and
7. Claims 3, 4, 9, 10, 42, and 43 were objected to as being dependent upon a rejected base claim but indicated as drawn to allowable subject matter.

Applicants acknowledge with appreciation the Examiner's indication of allowable subject matter and submit that the rejections and objections should be withdrawn for the reasons discussed below.

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

### **Objection to the disclosure**

The objection to the disclosure is rendered moot by the amendments to claim 12 presented herein.

### **Objection to claims 3, 4, 9, 10, 42, and 43**

The Examiner objected to claims 3, 4, 9, 10, 42, and 43 as being dependent upon a rejected base claim, indicating that these claims would be allowable if rewritten in independent form with the features of the base and intervening claims. By this Amendment, each of claims 3 and 9 is re-written in independent form including the recitations of independent claim 1.

Because claims 3 and 9 are now in the form the Examiner indicated would be allowable, and since claims 4 and 10 depend from allowable claims 3 and 9, respectively, Applicants request withdrawal of the objection to claims 3, 4, 9, and 10 and the timely allowance of these claims.

Claims 42 and 43 depend from base claim 41, which Applicants deem allowable for the reasons discussed below. Applicants therefore request withdrawal of the objection to claims 42 and 43 and the timely allowance of these pending claims.

### **Rejection of claims 41 based on *Reintjes***

Applicants traverse the rejection of claim 41 under 35 U.S.C. § 102(b) because *Reintjes* fails to anticipate this claim as currently presented. In order to properly anticipate Applicants' claimed invention under 35 U.S.C. § 102(b), each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be shown in as complete detail as is contained in the...claim." See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th Ed. 2001), p. 2100-69.

Claim 41, as currently presented, recites a method including *inter alia*:

varying a load at which the engine is run according to a criteria . . .  
[and]

providing engine fluid from the engine to a particle counter while  
varying the load.

*Reintjes*, which describes a system for monitoring particles in engine oil (Abstract; col. 2, lines 20-39), does not anticipate claim 41. *Reintjes* does not disclose or suggest at least “varying a load at which the engine is run according to a criteria,” as currently claimed. The Examiner alleged that “[b]ecause . . . [*Reintjes*’s] system can be used *in situ* in an automobile or aircraft engine, it will be used at varying engine loads” (OA at 2). Even if this allegation were true, it does not support the notion that *Reintjes* anticipates the claimed “varying.” That the engine in *Reintjes*’s system might be subject to natural load variations during operation (i.e., load variations *in situ*) does not support the allegation that the reference teaches or suggests a method which includes “varying a load at which the engine is run,” as claimed. Regardless, engine load variations occurring while an engine is used *in situ* do not anticipate “varying a load at which the engine is run *according to a criteria*,” as recited in claim 41.

*Reintjes* further fails to disclose or suggest “providing engine fluid from the engine to a particle counter while varying the load [according to the criteria],” as claimed. Accordingly, *Reintjes* does not teach or suggest each and every feature of claim 41.

Because *Reintjes* does not teach or suggest each and every feature of independent claim 41, as a matter of law, it cannot anticipate this claim. Applicants thus request withdrawal of the rejection of claim 41 under 35 U.S.C. § 102(b) and the timely allowance of this pending claim.

**Rejection of claims 18-20 based on *Haarstad***

Applicants traverse the rejection of claims 18-20 under 35 U.S.C. § 102(b) because *Haarstad* fails to anticipate the claims. As currently presented, independent claim 18 recites, *inter alia*, a “filtration system for cleaning engine fluid *during an engine dynamometer test*, comprising an external pump for drawing the engine fluid from the engine *during the dynamometer test . . .*” (emphasis added). *Haarstad* does not disclose at least these claimed features and therefore fails to anticipate claim 18. Because *Haarstad* fails to anticipate claim 18, the rejection of this claim based on *Haarstad* should be withdrawn. The rejection of claims 19 and 20 should also be withdrawn, at least because of the dependence of those claims from base claim 18. Accordingly, Applicants request withdrawal of the rejection of claims 18-20 under 35 U.S.C. § 102(b) and the timely allowance of these claims.

**Rejection of claims 1, 2, 5-8, 12-19, 22, 25, 41, and 49-52 based on *Verdegan***

The rejection of claim 1 is rendered moot by the cancellation of that claim. Further, claims 2, 5-8, and 49-52 should be allowed at least because of the dependence of those claims from allowable base claim 3. Applicants traverse the rejection of claims 12-19, 22, 25, and 41 under 35 U.S.C. § 102(b) because *Verdegan* fails to anticipate the claims.

Similar to allowable claim 9, independent claim 12, as currently presented, recites a combination of elements including *inter alia*:

a computer system for *identifying a characteristic of a quality of build of the engine based on an analysis of the characteristic of the cleanliness of the engine fluid.*

*Verdegan*, which describes a “lubricant filtering and monitoring system” (Abstract), does not teach or suggest at least the above features of claim 12. Because *Verdegan* does not teach or suggest each and every feature of independent claim 12, as a matter of law, it cannot anticipate this claim.

As indicated above, independent claim 18 recites, *inter alia*, a “filtration system for cleaning engine fluid *during an engine dynamometer test*, comprising an external pump for drawing the engine fluid from the engine *during the dynamometer test . . .*” (emphasis added). *Verdegan* does not disclose at least these claimed features and therefore fails to anticipate claim 18.

Independent claim 22, as currently presented, recites a method including:

measuring characteristics of the cleanliness of the engine fluid  
during a test cycle in which the engine is run at varying loads; and  
variably operating a filtration system based on the varying loads.

Although *Verdegan* mentions filtering, the reference does not teach or suggest “variably operating a filtration system based on . . . varying loads [at which the engine is run during a test cycle], as recited in claim 22. Even if, as the Examiner alleges, *Verdegan* were to disclose varying engine loads (Applicants disputing that contention), the reference does not teach or suggest “variably operating a filtration system based on the varying loads,” as claimed. For at least this reason, *Verdegan* does not anticipate claim 22.

As noted above, independent claim 41 recites a method including *inter alia*:

varying a load at which the engine is run according to a criteria . . .  
[and]  
providing engine fluid from the engine to a particle counter while  
varying the load.

*Verdegan* does not disclose or suggest the above-noted features. The Examiner alleged that “[b]ecause . . . [*Verdegan*’s] system can be used on-line in an automobile engine, it will be used at varying engine loads” (OA at 3). Even if this allegation were true, it does not support the notion that *Verdegan* anticipates the “varying” recited in claim 41. The mere assertion that an engine operates at various loads during operation does not support the allegation that *Verdegan*

discloses or suggests a method which includes “varying a load at which the engine is run.” Regardless, engine load variations occurring during operation do not anticipate “varying a load at which the engine is run *according to a criteria*,” as claimed. *Verdegan* further fails to disclose or suggest “providing engine fluid from the engine to a particle counter while varying the load [according to the criteria],” as claimed. Accordingly, *Verdegan* does not teach or suggest each and every feature of claim 41. Failing to teach or suggest each and every feature of independent claim 41, *Verdegan*, as a matter of law, cannot anticipate claim 41.

Because *Verdegan* fails to anticipate independent claims 12, 18, 22, and 41, the rejection of these claims under 35 U.S.C. § 102(b) based on *Verdegan* is improper and should be withdrawn. The rejection of claims 13-17, 19, and 25 should be withdrawn as well, at least because of the respective dependence of those claims from base claims 12, 18, and 22. Further, the rejection of claims 2, 5-8, and 49-52 should be withdrawn at least because of the dependence of those claims from allowable base claim 3. Applicants thus request withdrawal of the rejection of claims 2, 5-8, 12-19, 22, 25, 41, and 49-52 under 35 U.S.C. § 102(b) based on *Verdegan* and the timely allowance of these pending claims.

**Rejection of claims 23, 24, and 53 under 35 U.S.C. § 103(a)**

The rejection of claim 53 should be withdrawn at least because claim 53 ultimately depends from allowable base claim 3. Further, Applicants traverse the rejection of claims 23 and 24 under 35 U.S.C. § 103(a) because *prima facie* obviousness has not been and cannot be established based on *Verdegan*.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), each of three requirements must be met. First, the cited references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the references themselves or in

the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” M.P.E.P. § 2143 (8th ed. 2001).

Claims 23 and 24 depend from base claim 22. As explained above, *Verdegan* does not teach or suggest each and every feature of base claim 22. Accordingly, *prima facie* obviousness has not been established with respect to claims 23 and 24,<sup>2</sup> which, by virtue of their dependency, include all of the features of claim 22.

For at least the foregoing reasons, the rejection of claims 23, 24, and 53 under 35 U.S.C. § 103(a) should be withdrawn. Applicants thus request withdrawal of the rejection of claims 23, 24, and 53 under 35 U.S.C. § 103(a) and the timely allowance of these pending claims.

#### **New claims 55-68**

New claims 55-60 should be allowed at least because of their dependence from allowable base claim 9. Further, Neither *Reintjes*, *Verdegan*, nor *Haarstad*, nor any combination thereof, teaches or suggests each and every feature recited in new claims 61-68. Applicants therefore request the timely allowance of the new claims.

#### **Conclusion**

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner. The proposed amendments of claims 2, 3, 5, 6, 8, 9, 12, 18, 22, 30, 41, and 49

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<sup>2</sup> Applicants submit that *Verdegan* fails to disclose “halting the running of the engine when a malfunction criteria is met” as recited in claim 23 and 24 and “wherein the malfunction criteria includes a decrease in engine cleanliness over time,” as further recited in claim 24. Applicants note that the Examiner conceded (OA at 4) that *Verdegan* fails to disclose that “the running of the engine is halted in response to cleanliness characteristics.” Although Applicants note other aspects of claims 23 and 24 that distinguish these claims from *Verdegan*, Applicants do not acquiesce to the Examiner’s allegations (OA at 4) that it would have been “obvious to halt engine operation” or the related allegations in item 18 (page 6) of the OA.

and addition of new claims 55-68 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. This Amendment should therefore allow for immediate action by the Examiner.

Applicants respectfully point out that the final action by the Examiner presented some new arguments as to the application of the art against Applicants' invention. Entry of this Amendment would allow Applicants to reply to the final rejections and place the application in condition for allowance, or in better form for appeal, should the Examiner dispute the patentability of the pending claims.

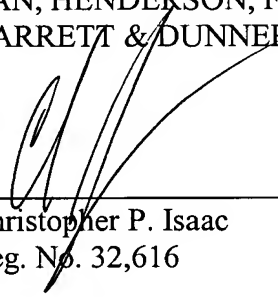
The claimed invention is neither anticipated nor rendered obvious in view of the references cited against this application. Applicants therefore request the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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